

how manageable the magnetic Virtue is in respect to its Direction; and how defective most of the Hypotheses are, which have been raised to account for the *Phænomena* of the Loadstone.

Your obedient humble Servant,

Gowin Knight.

IV. *An Account of some very curious Wasps Nests made of Clay in Pensilvania; by Mr. John Bartram: Communicated by Mr. Peter Collinson, F. R. S.*

Read April 25. 1745. **M**R. *John Bartram*, a diligent Observer of natural Productions, sent me, from *Pensilvania*, two Sorts of curious Wasps Nests made with Clay, which are commonly built against the Timber under the Roofs of Houses and Pales, to shelter them from the Weather. They feed as the Bees, on Flowers; but whether they sting like them I do not yet know.

The plain Clay-Nest is fabricated by a small black Wasp, of the same Species of that in TAB. III. *Fig. 1.* but less, that has a Speck or Stripe of Yellow in its Tail; and the Cells are made four or five together, joining Side by Side to each other. But the Clay-Nests that are so elegantly wrought are built by a purplish black Wasp, such as is figured
TAB.

TAB. III. *Fig. 2.*: After one Cell is formed, they stop it up, and join another to its End, and then add another to that; which makes these wrought Clay Fabrics longer than the plain ones.

Their Method of Working is much alike, and it is very diverting to see them at it: Their Art and Contrivance is wonderful; and, as if it was given to cheer them at their Labours, they make a very particular musical Noise, the Sound of which may be heard at ten Yards Distance.

Their Manner of Working is, to moisten Clay, and temper it up into a little Lump, of the Size of Swan-shot. This they carry to build with; they begin first at the upper End of the Cell, and work downwards, until it is long enough to contain the Nymph or *Chrysalis*: After they have spread out the little Lump in a proper Manner to form their little Fabric, they set up their musical Notes, and return to temper and work up more Clay for the next Course. Thus they continue alternately singing and working, until a Cell is finished; which is made delicately smooth withinside; then, at the further End of each Cell, they lay an Egg; after this, by surprising Instinct, they go and catch Spiders, and cram the Cell full of them: But it is further wonderful to observe, that they only in some manner disable the Spiders, but not kill them; which is to answer two Purposes; first, that they should not crawl away before the Cell is finished; and next, that they may be preserved alive and fresh until the Egg hatches, which is soon.

The Spiders, by wonderful Instinct, are provided for the *Embryo* to feed on: Having stor'd up sufficient for its Support, she very securely closes up the Cell, and then proceeds to build the next in the same Manner.

The Maggot or *Embryo*, having eat up all its Provision, before *October* prepares for its Change, and spins itself up in a fine soft silken Case, in which it lies all the Winter in the *Chrysalis*-State, until the Spring, when it eats its Way out of its Clay-Dwelling.

April 3. 1745.

P. Collinson.

Since the above Account was read before the *Royal Society*, I have had the Pleasure to peruse Mr. *Reaumur's* excellent Work, Vol. VI. on the Clay-Nests from *St. Domingo*; but as these from *Pennsylvania* differ in many Circumstances, I hope it will not be unacceptable to the Curious to see their Figures, with the best Account I could procure of them. It may deserve our Notice, that these Species of *Ichneumon* Wasps from *America*, like ours in *Europe* of the same Tribe that feed their young with Spiders, very much excel them in the elegant Structure of their Nests.

Fig. 3. A plain Clay-Nest, with single Rows of Cells.

Fig. 4. The Backside of the same, by which it was attached to the Timber-Work of a Building; the
A a a
Cells

Cells being partly open, containing some of the *Embryo's* in them.

Fig. 5. Part of a wrought, or wreathed tubulated Clay-Nest, as it appears in Front on the Outside.

Fig. 6. The Backside of the same, where it adhered to the Timber-Building or Pale; some of the Cells being open, disclose the Spiders lodged in them.

Fig. 7. Part of such another Nest as *Fig. 5.*

Fig. 8. The Backside of *Fig. 7.* in which some of the Cells being open discover Spiders lodged in them.

V. Extraēt of a Letter from Mr. B-- B---r, containing an Account, in Pounds and Ounces, of the surprizing Quantities of Food devoured by a Boy, 12 Years old, in 6 successive Days, who labour'd under a Canine Appetite, at Black Barnsley in Yorkshire. Communicated by Dr. Mortimer, Secret. R. S.

April 15. 1745.

Read April 25. 1745. **T**HE Boy was regular as other Children, till about a Year ago, when this extraordinary Craving of Appetite first began; which afflicts him to such a Degree, that (they tell us) if he was not fed as he called out for it, he would gnaw the very Flesh off his own Bones; so that, when awake, he is constantly devouring; it can hardly be said eating, because nothing passes his Stomach, all is thrown up again.

Fig. 1. p. 363.



Fig. 2. p. 364.



Fig. 3. p. 365.

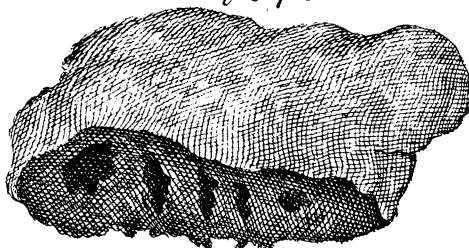
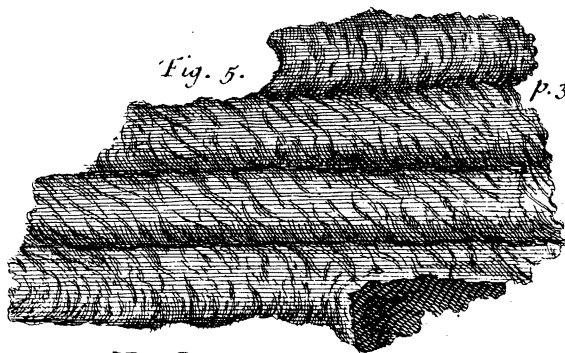


Fig. 4.

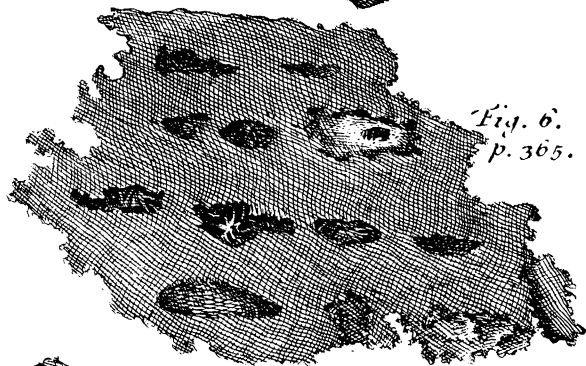


Fig. 5.

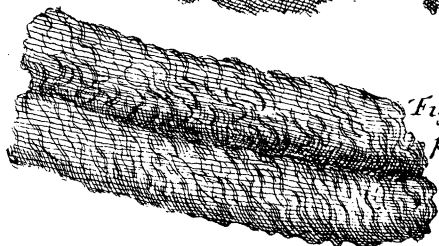
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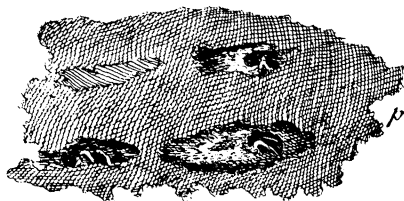
*Fig. 6.
p. 365.*



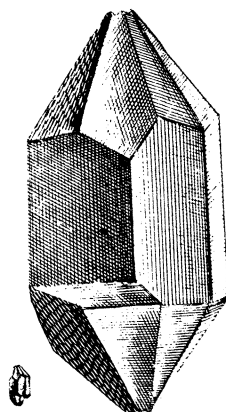
*Fig. 7.
p. 365.*



*Fig. 8.
p. 365.*



*Fig. 10.
p. 468.*



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Fig. 4. p. 365.



*Fig. 9.
p. 463.*

Fig. 1. p. 363.



Fig. 2. p. 364.



Fig. 3. p. 365.



Fig. 4. p. 365.



Fig. 5.

p. 365.

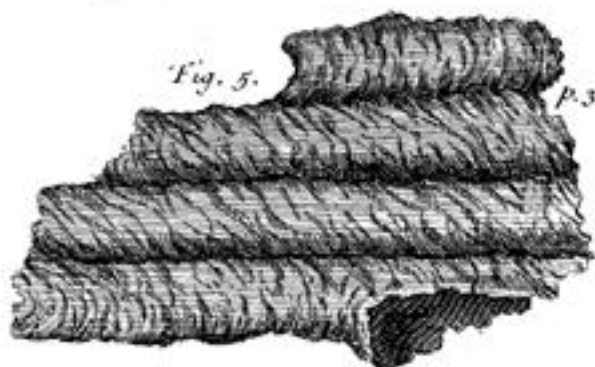


Fig. 6.
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Fig. 7.
p. 365.

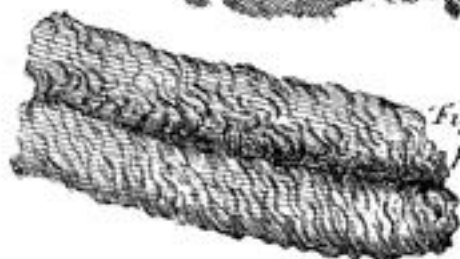


Fig. 8.
p. 365.



Fig. 10.
p. 468.



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Fig. 9.
p. 463.

